

9 - SDM&T Presentation

Monday, February 01, 2016
10:18 AM



Every day, people at

Mines

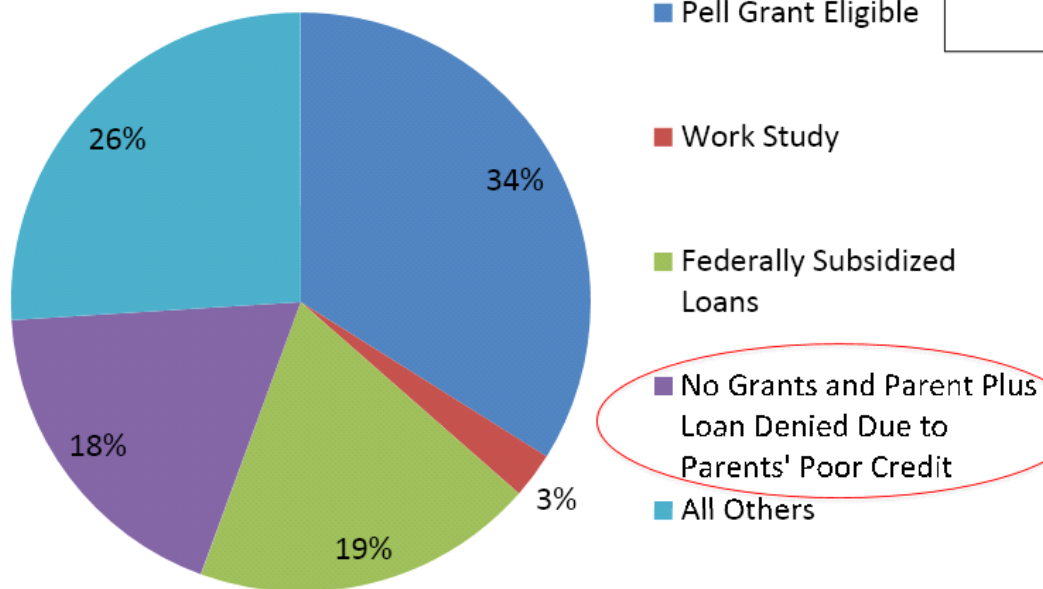
prepare leaders in engineering and science,
increase the world's knowledge and serve others.

February 2016



Why The Tuition Freeze Matters

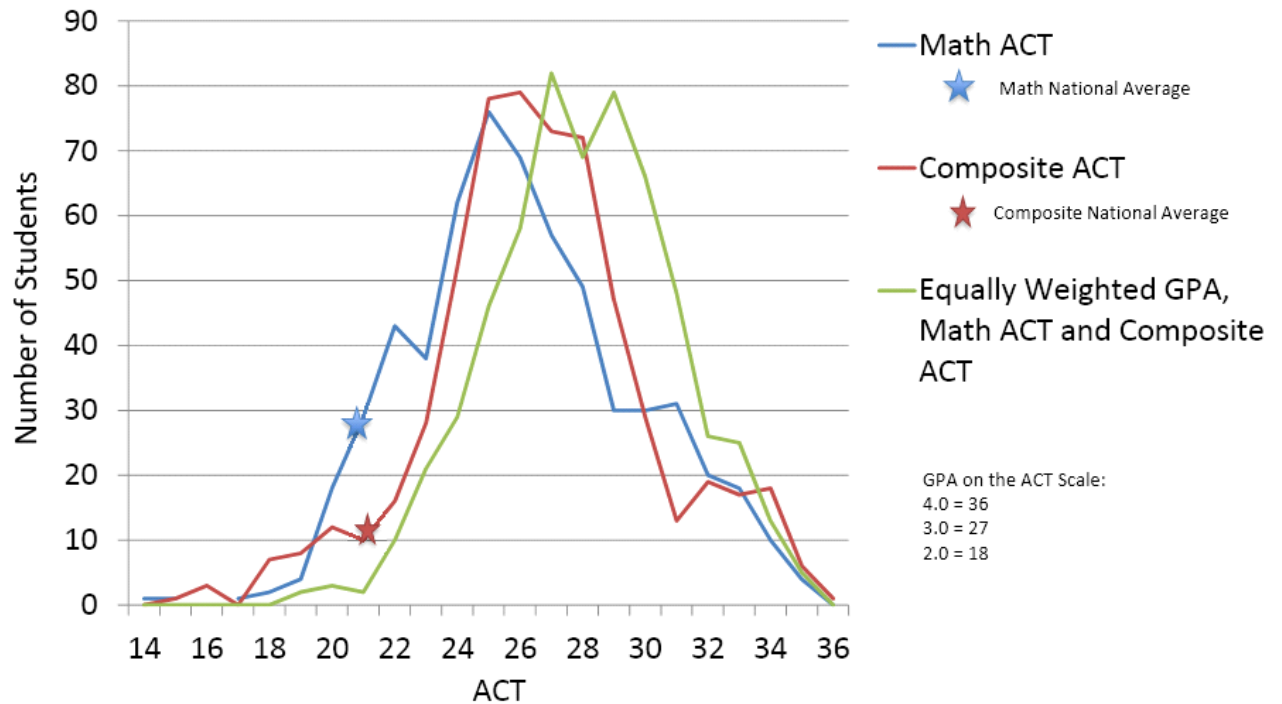
Freshman South Dakotans @ Mines



An Even Greater Team

Academically -- High Achievers

And Choosing to Study Challenging Subjects the State Needs

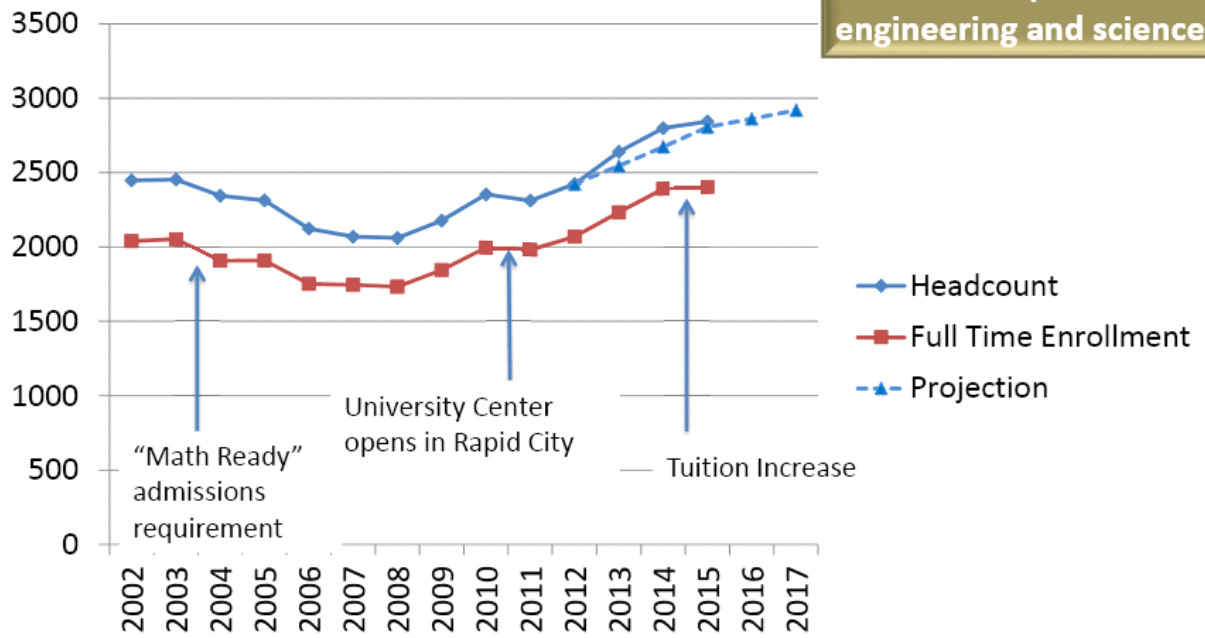


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Enrollment

SD and National Shortage of Engineers and Scientists

Goal: Prepare more undergraduate students for leadership in engineering and science



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Improving Facilities -- Wellness

A Year Ago



Finished!



- 24,000 new ft²
- 10,000 improved ft²
- 2 Rec Gyms
- Cardio, Bouldering Wall
- Funded by Students and Donors

Goal: Redevelop and expand needed living, learning, and research spaces.

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Chemistry, Biology & Chemical Engineering

- Authorized by legislature in 2015
- Construction underway
- Completion projected December 2016



Total: \$6,559,000 HEFF Bonds and M&R



Placer Hall

Residence Hall
Built by Mines Foundation
Opens Fall 2016

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Using Added Maintenance and Repair Funds Wisely

Some of the projects the added general funds have supported

- Repaired water infiltration in main classroom building
- Upgraded lighting in McLaury building to reduce maintenance needs, improve efficiency
- Resolved fire suppression code violation in the main server room
- Repaired main campus boiler and completed plant maintenance
- Upgraded three classrooms
- Replaced HVAC system for a main lecture hall and added cooling
- Replaced steam traps throughout campus to improve system efficiency
- Replacing entryways beyond useful life, update 40+ year old locker room and main lobby area of King Center



Bringing Industrial Engineering back to campus

- Eliminate lease payment
- Improve space utilization

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FY16 Unrestricted Budget

Unrestricted	
Operating Revenues	\$30,376,159
Non-Operating Revenues	\$16,871,260
Total Revenues	\$47,247,419
Operating Expenses	\$45,547,342
Increase in Net Assets	\$1,700,077

- 3.6% positive margin
- FY15 reductions in overhead staff continued while protecting teaching
- Annually review all programs; restructured three in FY15
- Strengthened finance team and financial processes
- Exceeded end of FY15 target for restoring cash balances

Goal: Responsibly steward financial and physical resources.

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Internships & Professional Development

- 78% of recent graduates have at least one co-op or internship
- Mines interns at 223 companies
- **77 were SD Companies**
- \$17.57/hour



It's the...



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Student Success – A Math Problem

Start In	Percent of Recent Freshmen Starting	Eventually Pass Calc I	Retained to Sophomore	Graduate in 6 years
Algebra	22%	37%	63%	26%
Trig	31%	80%	76%	58%
Calculus I (or above)	46%	96%	88%	73%

In recent years, ~40% of engineering and science students earned a D, F or withdrew from their first college math class at Mines.

How can we change this?

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Preliminary Results

Summer 2015 Donor Funded Experiment

We can't claim causation, but we did see significant improvement

Fall Semester Math Classes

	2014 Freshman Cohort Pass Rate	2015 Freshman Cohort Pass Rate	Change
Algebra	72% AVG Math ACT: 26.4	81% AVG Math ACT: 20.2	+9%
Trig	72% AVG Math ACT: 26.4	77% AVG Math ACT: 25.6	+5%
Calc I	69% AVG Math ACT: 25.2	81% AVG Math ACT: 27.1	+12%
Calc II	77% AVG Math ACT: 29.42	78% AVG Math ACT: 29.39	+1%

Even though the 2015 freshman class came in less well prepared in math, they did significantly better than last year's class.

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